

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re Application of: Jurgen Schonlau

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Examiner:

T. McAnulty

For:

ACTUATION DEVICE FOR A MOTOR VEHICLE

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BRIEF ON APPEAL

Honorable Sir:

This Appeal is taken from the Examiner's Final Rejection dated January 12, 2004 (Paper No. 10) of Claims 33-40 in the above-identified application. The Notice of Appeal was timely filed on April 15, 2004. Submitted herewith are two additional copies of this Appeal Brief.

(1) Real Party In Interest

The Real Party In Interest is Continental Teves AG & Co. of Frankfurt, Federal Republic of Germany.

(2) Related Appeals and Interferences

None.

(3) Status Of Claims

Claims 33-40 are pending in the application and are involved in this Appeal. Claims 24-32 are withdrawn from consideration. Claim 33 is an independent claim and Claims 34-40 ultimately depend from Claim 33. The present application was filed on December 14, 2001 with a Preliminary Amendment that canceled originally-filed Claims 1-15 and added Claims 16-32. In response to an Election/Restriction Requirement, Appellant elected Species I, as shown in Figures 1 and 2, and drawn to Claims 16-23. In response to a first Office action dated July 24, 2003 (Paper No. 8), Appellant canceled Claims 16-23 and added Claims 33-40. In response to a final Office action dated January 12, 2004 (Paper No. 10), Appellant filed a Request For Reconsideration. In response to an Advisory Action dated March 22, 2004 (Paper No. 03182004), Applicant filed a Notice of Appeal. No claims have been allowed.

(4) Status Of Amendments

All amendments have been entered for purposes of this Appeal.

(5) Summary Of The Invention

By way of background, actuation devices are generally known in the art, especially for clutches. Actuation devices for clutches must satisfy many different requirements. One requirement is that the actuation device need only little mounting space because the space required by the actuation device reduces the space that can be used for passengers in the vehicle interior. A detriment for the available space for locating the actuation device is the steering column that passes through a wall in the area where a pedal stand is attached. In

addition, there are many transverse reinforcements in this area that extend from one vehicle side to the other vehicle side to reinforce the vehicle compartment.

In addition, the actuation device must satisfy the comfort requirement of various operators. To this end, the adjustability and adaptability of the pedal lever position to different drivers of different heights, especially buttock-to-ankle length, is absolutely necessary.

Also, the actuation device must comply with safety requirements, i.e., the actuation device must have a favorable collision performance. In view of the above, most different concepts withdraw the pedal lever actively from the operator in the event of a vehicle crash. However, the different approaches conventionally available eliminate the above-mentioned problems only in part. For example, one conventional solution swivels a pedal assembly comprised of a master brake cylinder and brake force booster in the event of a crash, but is not appropriate for the adjustability of the pedal lever position to satisfy the comfort requirement of various operators.

In another example, a pyrotechnic propellant is ignited in the case of a crash, and the gas pressure drives a piston device so that a pedal lever articulation arrangement is released by means of a locking element. A device of this type requires a crash sensor and an electronic control unit that sends an ignition signal to the propellant. The employment of pyrotechnic components in a vehicle requires special safety provisions, even during the assembly at the vehicle manufacturer's premises because erroneous activation or malfunction must be avoided at all times.

Further, the actuation device is typically procured from a supplier as an independent unit, quasi-isolated from the other vehicle components. As a result, the actuation device may be easily mounted into one vehicle, but may not be easily mounted in a different type of vehicle.

To overcome these problems, the actuation device of the claimed invention comprises a pedal stand mounted to said vehicle, said pedal stand including a base member pivotally attached to a first axis by an adjustable means for fixation, a housing for a generator, and a pedal lever pivotally attached to the base member. The pedal lever and the generator are operatively coupled to one another and jointly swivel in relation to the pedal stand. The pedal lever further includes first and second legs, wherein the first leg causes said second leg to act on the generator when pressure is asserted on the first leg. Because the actuation device satisfies the many different requirements without the use of special safety provisions, the present invention permits integration into different vehicle types at low cost without the necessity of special safety provisions for the prevention of malfunctions.

In view of the foregoing, the advantages of the present invention will be appreciated.

(6) Issues

- A. Are Claims 33-37 unpatentable under 35 USC §103(a) over Johansson et al. (U.S. Patent No. 6,305,239, hereinafter "Johansson") in view of Wolpert (DE 197 06 692, hereinafter "Wolpert")?
- B. Are Claims 38-40 unpatentable under 35 USC §103(a) over Johansson and Wolpert, and further in view of Rixon et al. (U.S. Patent No. 5,809,399, hereinafter "Rixon")?

(7) Grouping Of Claims

Independent Claim 33 is separately patentable. Dependent Claims 34-40 stand or fall with independent Claim 33.

(8) Argument

A. Claims 33-37 Are Not Obvious In View Of Johansson And Wolpert

Claims 33-37 were rejected under 35 USC §103(a) as being obvious in view of Johansson and Wolpert. Appellant respectfully traverses this rejection, and submits that these claims are not obvious in view of the cited prior art.

Independent Claim 33 specifies, *inter alia*, an actuation device for a motor vehicle comprising a pedal stand mounted to the vehicle, a housing for a generator, and a pedal lever, pivotally attached to a base member, wherein the pedal lever and the generator are operatively coupled to one another and jointly swivel in relation to the pedal stand.

In the final Office action, the Examiner rejected Claim 33 stating:

"Johansson et al. discloses in figures 1-2 a actuation device comprising a pedal stand 2,3; a base member 14 pivotally connected to said pedal stand; an adjustment mechanism; a generator 36 inherently including a housing (not shown); a pedal lever 6 pivotally connected to said base member; but does not disclose said pedal lever including two legs. However, DE 197 06 692 teaches in figure 2, a pedal mechanism comprising among other things a pedal lever including a first leg and a second leg wherein said second leg is connected to a generator. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the apparatus of Johansson et al. in view of the teachings of DE 197 06 692 that it is old and well known in the art to provide a pedal lever having two legs so as to provide actuation of said generator in a direct opposite to a direction of actuation of said first leg. (Emphasis Added.)

Johansson discloses an adjustable pedal arrangement including a mounting arrangement 1 for attachment to a vehicle structure 37, an accelerator pedal 6, a brake pedal 7, and a clutch pedal 8. The pedals 6, 7, 8 are pivotally supported with respect to the mounting arrangement 1 and define a first pivot axis 9. An adjustment element 5 is pivotally supported with respect to the mounting structure 1 and defines a second pivot axis 4. The pedals 6, 7, 8 are pivotally mounted within the adjustment element 5 to pivot about the first pivot axis 9. Thus, the first pivot axis 9 moves with respect to the second pivot axis 4 when the adjustment element 5 is rotated.

Wolpert (DE 197 06 692) discloses a pedal arrangement having at least one pedal. The pedal swivels about a swiveling axis and is disposed on a bearing block. The bearing block for the pedal is fixed to the vehicle body. A lever extension on the pedal projects beyond the swiveling axis to an opposite side, and a transmitting rod, which extends in a longitudinal direction of the vehicle, is linked at one end in a force-transmitting manner to the lever extension. A lever arm of a double-armed lever rocker is linked to another end of the transmitting rod. An opposite lever arm of the double-armed lever rocker is linked to a plunger rod of the brake operating booster. The lever arm is swivellably disposed on a front wall by a second bearing block. As best illustrated in Figure 2, the brake operating unit and the pedal are attached to separate bearing blocks. Thus, the position of the pedal relative to

the brake operating unit changes when a frontal impact occurs. The second bearing block, along with the double-armed lever and plunger, move forward into the vehicle. The first bearing block and the brake pedal remain relatively unaffected.

In contrast, the claimed invention is directed towards an actuation device wherein the pedal lever and the generator **jointly swivel** in relation to the pedal stand. Thus, during a frontal impact, for example, the position of the pedal lever relative to the generator is generally unaffected during the displacement. The frontal impact causes the second leg of the pedal lever to act on the generator, thereby performing the same function as if a force was asserted on the first leg of the pedal lever.

According to MPEP §2143, to establish a prima facie case of obviousness, three criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. In re Linter, 458 F.2d 1013, 173 USPO 560, 562 (CCPA 1972). Second, there must be a reasonable expectation of success. In re Merck & Co., Inc., 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Finally, the applied reference must teach or suggest all the claim limitations. In re Royka, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. In re Mills, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990). Further, the fact that the claimed invention is within the capabilities of one of ordinary skill in the art is not sufficient by itself to establish a prima facie case of obviousness without some objective reason to combine the teachings of the references. Ex parte Levengood, 28 USPQ2d 1300 (Bd. Pat. App. & Inter. 1993). Further, it is well established that even if all elements of a claim are disclosed in the prior art, the claimed invention taken as a whole cannot be said to be obvious without some reason given in the prior art why one of ordinary skill would have been prompted to combine the teachings of the prior art to arrive at the claimed invention. In Re Regal, 188 U.S.P.Q. 136,139 n.6 (C.C.P.A. 1975).

It is respectfully submitted that there is no mention in Johansson and Wolpert of at least the feature of an actuation device wherein the pedal lever and the generator **jointly**

<u>swivel</u> in relation to the pedal stand. Thus, the combination of Johansson and Wolpert does not disclose all the claim limitations, as recited in Claim 33, and therefore the Examiner does not establish a *prima facie* case of obviousness.

In view of the foregoing, the Examiner's rejection of Claims 33-37 under 35 U.S.C. §103(a) over the applied art should be reversed.

B. Claims 38-40 Are Not Obvious In View Of Johansson, Wolpert And Rixon

Claims 38-40 were rejected under 35 USC §103(a) as being obvious in view of Johansson, Wolpert and Rixon. Appellant respectfully traverses this rejection, and submits that these claims are not obvious in view of the cited prior art.

Claims 38-40 depend from Claim 33. Rixon discloses an adjustable pedal assembly. However, Rixon does disclose a pedal assembly wherein a pedal lever and a generator **jointly swivel** in relation to a pedal stand. Accordingly, Rixon adds nothing to overcome this shortcoming in Johansson and Wolpert. Thus, the combination of Johansson, Wolpert and Rixon fails to disclose, teach or suggest all of the claim limitations of claimed invention, as recited in Claim 33. Accordingly, the Office action fails to establish a *prima facie* case of obviousness.

In view of the foregoing, the Examiner's rejection of Claims 38-40 under 35 U.S.C. §103(a) over the applied art should be reversed.

(9) Conclusion

For the above reasons, Appellant respectfully submits that Claims 33-40 are patentable over the applied art, taken singly or in combination. Therefore, the Board is respectfully requested to reverse the Examiner's decision.

Respectfully submitted,

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Appendix Of Claims On Appeal - Claims 33-40

- 33. An actuation device for a motor vehicle, comprising:
- a pedal stand mounted to said vehicle, said pedal stand including a base member pivotally attached to a first axis by an adjustable means for fixation,
 - a housing for a generator,
 - a pedal lever, pivotally attached to said base member,

wherein said pedal lever and said generator are operatively coupled to one another and jointly swivel in relation to said pedal stand, and

wherein said pedal lever further includes first and second legs, wherein a pressure is asserted on said first leg causing said second leg to act on said generator.

- 34. An actuation device as in claim 33, wherein said pedal lever includes a means for torque transmission, said means for torque transmission deviates a force towards said interior of said vehicle, and said means for torque transmission operatively engages said pedal lever in a swiveling movement.
- 35. An actuation device as in claim 33, wherein said pedal lever includes a means for torque transmission, said means for torque transmission operatively engages said pedal lever in a swiveling movement such that said pedal lever initiates a brake actuation independent of a driver in the case of vehicle deformation.
- 36. An actuation device as in claim 33, wherein said first leg of said pedal lever includes a foot actuation part, said second leg of said pedal lever includes a point of articulation at which an actuating member for the generator is secured, said second leg of said pedal lever further includes a baffle head, said baffle head contacts a component of said vehicle in a force-transmitting contact in the event of a vehicle deformation earlier than said first leg contacts said component of said vehicle.

- 37. An actuation device as in claim 33, wherein said first and second legs are diametrically opposed.
- 38. An actuation device as in claim 33, wherein said adjustable means for fixation includes a threaded spindle-and-nut arrangement, said threaded spindle-and-nut arrangement permits a determinable swiveling movement of said base member in relation to said pedal stand such that the position of said pedal lever in relation to said generator is maintained.
- 39. An actuation device as in claim 33, wherein said adjustable means for fixation includes an electric motor, said electric motor is connected to a control unit by means of a bus link, said control unit includes a memory module unit for storing adjustment positions.
- 40. An actuation device as in claim 39, wherein said control unit and said memory module are a part of a control unit for an electronically controlled vehicle brake system.